

Scientific Literature and Other Publications by Sandia Scientists

A bibliography is presented here of articles and other publications (submitted articles, book chapters, book reviews and other miscellaneous reports) published by Sandia scientists in the area of solid-state lighting from 1992 through July 2003. The citations are organized by year, beginning with the most recent year. Within years, publications are ordered alphabetically by title. To skip directly to a particular year, click on the link, below.

2003	2002	2001	2000
1999	1998	1997	1996
1995	1994	1993	1992

2003

- "[Comment on 'Infrared spectroscopy of Mg-H local vibrational mode in GaN with polarized light'](#) - art. no. 037201", by C. H. Seager, in *Physical Review B* 6703(3):7201 (2003).
- "[Comparison of wavelength splitting for selectively oxidized, ion implanted, and hybrid vertical-cavity surface-emitting lasers](#)", by E. W. Young, K. D. Choquette, J. F. P. Seurin, S. L. Chuang, K. M. Geib, and A. A. Allerman, in *IEEE Journal of Quantum Electronics* 39(5):634-639 (2003).
- [Defect Reduction in Gallium Nitride using Cantilever Epitaxy](#), Thesis, C. C. Mitchell, UNM Electrical Engineering Department, 4/4/03, Albuquerque, NM
- "[Development of Phosphors for LEDs](#)," *The Electrochemical Society Interface*, by L. S. Rohwer, A. M. Srivastava, to be published summer 2003.
- "[Effect of tensile strain/well-width combination on the measured gain-radiative current characteristics of 635 nm laser diodes](#)", by G. M. Lewis, P. M. Smowton, P. Blood, and W. W. Chow, in *Applied Physics Letters* 82(10):1524-1526 (2003).
- "[Effects of Surface Modification on n- and p-type GaN Ohmic Contacts](#)," in preparation, by K. H. A. Bogart, D. D. Koleske, A. A. Allerman, A. J. Fischer, K. W. Fullmer, K. Cross, C. C. Mitchell, (plan to submit to *Applied Physics Letters* or to *J. Vacuum Science and Technology*).
- "[Electroreflectance of hexagonal gallium nitride at the fundamental and E-1 spectral regions](#)", by M. F. Al-Kuhaili, R. Glosser, A. E. Wickenden, D. D. Koleske, and R. L. Henry, in *Applied Physics Letters* 82(8):1203-1205 (2003).
- "[Ga Vacancies and Grain Boundaries in GaN](#)," by J. Oila, K. Saarinen, A. Wickenden, D. D. Koleske, R. Henry, M. Twigg, in *Applied Physics Letters* 82, 1021 (2003).
- "[Growth of GaN on porous SiC and GaN substrates](#)", by C. K. Inoki, T. S. Kuan, C. D. Lee, A. Sagar, R. M. Feenstra, D. D. Koleske , D. J. Diaz, P. W. Bohn, and I. Adesida, in *JOURNAL OF ELECTRONIC MATERIALS* 32(8):855-860 (2003).
- "[High-Density Plasma Etching of Wide-Bandgap Materials](#)," by R. J. Shul, R. D. Briggs, K. H. A. Bogart, A. J. Fischer, D. D. Koleske, A. A. Allerman, S. Jones, C. C. Mitchell, C. Sanchez, Vugraphs of Presentation to MRS Spring Meeting, 4/22-25/03, San Francisco, CA
- "[Hydrogen configurations, formation energies, and migration barriers in GaN](#)", by A. F. Wright, C. H. Seager, S. M. Myers, D. D. Koleske, and A. A. Allerman, in *Journal of Applied Physics* 94(4):2311-2318 (2003).
- "[Hydrogen Isotope Exchange and the Surface Barrier in P-Type Gallium Nitride](#)," by S. M. Myers, C. H. Seager, *Journal of Applied Physics*, submitted.
- "[Hydrogen Release from Magnesium-Doped GaN with Clean Ordered Surfaces](#)," by W. R.

- Wampler, S. M. Myers in *Journal of Applied Physics*, submitted.
- "In situ measurements of GaN nucleation layer decomposition", by D. D. Koleske, M. E. Coltrin, A. A. Allerman, K. C. Cross, C. C. Mitchell, and J. J. Figiel, in *Applied Physics Letters* 82(8):1170-1172 (2003).
 - "Many-Body Effects in Quantum-Dot Lasers," by H. C. Schneider, W. W. Chow, P. M. Smowton, E. J. Pearce, S. W. Koch, in *Proceedings of the Photonics West 2003 Conference*, 1/25-31/03, San Jose, CA. (invited)
 - "Mass transport and kinetic limitations in MOCVD selective-area growth", by M. E. Coltrin and C. C. Mitchell, in *Journal of Crystal Growth* 254(1-2):35-45 (2003).
 - "Microscopic Modeling of Gain and Luminescence in Semiconductors," by J. J. Hader, V. Moloney, S. W. Koch, W. W. Chow, *IEEE Special Issue on Quantum Electronics*, submitted 2/03.
 - "Modified spontaneous emission from erbium-doped photonic layer-by-layer crystals - art. no. 115106", by M. J. A. de Dood, A. Polman, and J. G. Fleming, in *Physical Review B* 6711(11):5106 (2003).
 - "Potential Impact of New Energy Efficiency Technologies on Global Climate Change: The Example of Solid-State Lighting," by J. M. Gee, J. Y. Tsao, and T. E. Drennen, submitted to *Mitigation and Adaptation to Global Change, An International Journal Devoted to Scientific, Engineering, Socio-Economic and Policy Responses to Environmental Change* (4/03).
 - "Photonic band gap effect in layer-by-layer metallic photonic crystals", by Z. Y. Li, I. El-Kady, K. M. Ho, S. Y. Lin, and J. G. Fleming, in *Journal of Applied Physics* 93(1):38-42 (2003).
 - "Roadmap projects significant LED penetration of lighting market by 2010," J. Y. Tsao, in *Laser Focus World*, May 2003.
 - "Solid-State Lighting: Lamp Targets and Implications for the Semiconductor Chip," by J. Y. Tsao, in *Proceedings of the 2003 International GaAs MANTECH Conference*, 5/19-22/03, Scottsdale, AZ
 - "Theory of Quantum Interference Phenomena in Semiconductor Quantum Dots: Frequency Upconversion in InGaN," by W. W. Chow, H. C. Schneider, M. C. Phillips, *Physical Review A*, in preparation.
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